

Statement of  
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Before The  
Senate Commerce, Science and Transportation Committee  
United States Senate

Washington, D.C.  
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Mr. Chairman and Members of the Committee:

My name is Matt Wiley and I am the Program Manager for the Boston Central Artery/Tunnel's Joint Venture management team of Bechtel and Parsons Brinckerhoff.

I am pleased to appear before you this morning to discuss the Boston Central Artery/Tunnel project, and to outline for the Committee the role of the Joint Venture.

The Joint Venture between Bechtel and Parsons Brinckerhoff Quade and Douglas, Inc., was established in 1985, and has served as Management Consultant for the Boston Central Artery/Tunnel project under contracts with the Massachusetts Highway Department and, subsequently, under management by the Massachusetts Turnpike Authority.

Mr. Chairman, Bechtel and Parsons Brinckerhoff together have nearly 220 years of experience in engineering and construction. These firms are proud of their longstanding reputations as pioneers in this business, and I can state unequivocally that they are proud of their work in this project. I can also state unequivocally that over the past 15 years, this Joint Venture has met or exceeded all of its professional obligations.

This is the largest and most complex highway project ever undertaken in the core of an American city. It has been an enormous technological and logistical undertaking, not only in building the physical infrastructure, but in doing so while the people of Boston have gone about their daily business largely unimpeded by the construction activity all around them.

I would like to give you an example. We are connecting the new Ted Williams Tunnel from Logan Airport to the Artery and Massachusetts Turnpike. This requires that we construct a four-lane tunnel under the main north-south railroad line through Boston. There are over 700 train movements a day on this segment of track. We cannot disturb the track, which has very low tolerances for movement, to avoid any possible threat of derailment. So we have frozen the ground to stabilize it through a very sophisticated set of cooling pipes, and are literally tunneling inch-by-inch through the unstable ground below the tracks at the same time that we are pushing a huge four-lane concrete "jack-box" tunnel just behind our digging equipment.

This is just one of many engineering feats that are being accomplished every day in Boston. The responsibilities of the Joint Venture Program Management team include preliminary design,

design and construction management, and financial planning and reporting. The vast majority of the design effort is associated with managing the section design contracts during construction.

Our construction management activity involves the management of the contractors performing the construction work, from the detailed planning through oversight of construction execution. It also includes contract administration; change-order negotiation; cost and schedule monitoring; quality inspection; and overall project safety.

Finally, we have responsibility for project controls, which includes estimating individual contract costs; monitoring individual contractor schedules; construction sequence planning; and monitoring and reporting on overall project cost and schedule. We also prepare periodic total cost and schedule updates as requested by the client.

If I may add an aside, Mr. Chairman, I would like to highlight one particular component, and that is workplace safety. Our goal is to see that every worker goes home safely at the end of every day. To that end, the Project has worked nearly 60 million person hours, and we have compiled a safety record that is 40 percent to 50 percent better than the national average for lost-time and recordable injuries.

I would like to commend the thousands of men and women who have contributed to this achievement. Their safety record has also helped generate substantial savings.

The Project has been recognized throughout for its high quality and innovation. I would invite the Committee and its staff to come to see the Project to view first hand the modern engineering masterpiece that is being built for the citizens of Massachusetts and the Northeast Region as a whole.

This Joint Venture is fully committed to the Boston Central Artery Project, and to continuing to provide the highest quality of professional service consistent with the reputations of its parent companies, and the Commonwealth of Massachusetts.

I thank you again for the opportunity to appear before your committee this morning, and I look forward to answering your questions.

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I understand from the Committee's staff that the Committee is particularly interested in my testimony to learn more about the following subjects:

- ! B/PB's Management Consultant role;
- ! Organizational approach to management of the project;
- ! B/PB's role in award of contracts; and
- ! B/PB's role in financial reporting.

#### **B/PB's Management Consultant Role**

Since 1985, the B/PB Joint Venture has performed management consultant services under the terms of a number of successive contracts, called work programs, first with the Massachusetts Department of Public Works (through work program no. 9, dated June 24, 1991) and then with the Massachusetts Highway Department (through the current work program, no. 14, dated June 26, 1996). In July 1997, the Massachusetts Turnpike Authority took over supervision of the Project.

B/PB is responsible for the overall program management on the Project. This role has evolved over time and currently includes preliminary design, design and construction management and financial controls and planning. The current design effort is primarily involved in managing the section design contracts during construction phase services.

Construction management comprises the bulk of B/PB's current responsibilities. This management

of the contractors performing the construction work includes contract administration, change order negotiation, cost and schedule monitoring, quality inspection and overall Project safety.

B/PB's Project controls work includes estimating individual contract costs, overall Project cost and schedule monitoring and reporting, construction sequence planning, and monitoring individual contractor schedules.

B/PB also supports the MTA in the MTA's supervision of environmental, public affairs, legal, procurement, accounting and administration services for the Project.

### **The Organization of the Project's Management**

For the first 13 years of the Project, B/PB and the MHD (and later the MTA, when it took over the management of the Project) functioned as independent organizations, in some cases having duplicative or overlapping roles.

The role of the MHD/MTA has throughout the Project's existence been to establish policy, provide general direction and guidance, oversee the B/PB's performance as the state's management consultant, and make all major decisions concerning the CA/T Project.

### **The Integrated Project Organization**

In 1997 and 1998, the Project's management was changed by the MTA to an Integrated Project Organization (IPO). The basic idea behind this structure was to provide for an orderly transition to having MTA operate the Project upon its phased completion. The IPO was adopted with the full concurrence of the FHWA and the approval of the Massachusetts State Ethics Commission.

The concept was to have an integrated management structure where B/PB and MTA would have "counterparts" in each functional area, along with a direct interface between the B/PB Program Manager and the MTA Project Director. Over time, functions have been and will be transferred so that the MTA will have sole management responsibility for them.

Both Bechtel and Parsons Brinckerhoff have worked on many other major projects using an integrated project organization approach. Both companies have found that an integrated approach, like the one now in place on the CA/T Project, can be a very effective way to manage a major project.

Under the Project's IPO, the MTA has at all times retained final responsibility and authority for the direction and management of the Project, including maintaining independent oversight over B/PB. At the same time, B/PB has remained professionally and contractually accountable to MHD/MTA and the Commonwealth for the quality and the performance of its management consultant services, as set out in the various work programs.

The implementation of the IPO at the Project at no time impaired B/PB's exercise of its independent professional judgment. Nor has it ever compromised B/PB's integrity or ethical standards in performing its professional obligations.

### **B/PB's Role in Award of Contracts**

B/PB's role in the award of contracts has two components. First, B/PB has entered into a number of contracts in its own name with sub-consultants. These sub-consulting contracts include engineering, conceptual design, and some management activities. Although these agreements with the subconsultants are in B/PB's name, they are reviewed and approved by the MHD.

Second, B/PB also plays a role in the award of consulting and construction contracts by the MHD itself. For consulting contracts with the section design consultants, B/PB negotiates with and manages the design firm selected by the MHD. For construction contracts, B/PB prepares the requests

for proposals (bids), analyzes the bids submitted, and then makes a recommendation to the MHD as to whether the low bidder is acceptable. Both consulting and construction contracts are entered into in the name of the MHD, but they identify B/PB as the MHD's management consultant and its representative for implementing the contract. I want to emphasize that although B/PB acts as the MHD's management representative for nearly all aspects of the MHD's contracts, the actual award of the work is solely the prerogative of the MHD.

### **B/PB's Role in Financial Reporting**

B/PB at all times provided MHD/MTA with all of the available information about the costs of the Project. Throughout its work on the Project, B/PB has met or exceeded all of its contractual and professional obligations for cost controls, consulting advice and reporting to MHD/MTA.

All reasonably certain financial information and data are included in the Project Monthly Management (PMM) Reports and the Finance Plans, both of which were developed with the full participation and knowledge of our client, as well as the FHWA.

The so-called "up-down" charts – which identified plus-and-minus future cost trends on the Project – were by their very nature speculative and not considered firm financial data. These materials were prepared by B/PB to provide a way for our client to identify the cost pressures and possible alternatives for resolving them.

### **Concluding Remarks**

The Committee staff has expressed an interest in soliciting B/PB's recommendations to avoid a recurrence of what has recently occurred on the Project with the announcement of the cost increases. This is a complicated issue involving inter-governmental relationships that I believe are beyond my expertise. However, B/PB's constituent companies, Bechtel and Parsons Brinckerhoff, would welcome the opportunity to participate in a dialogue with the appropriate governmental bodies in addressing these complex issues. We are certain other members of the engineering and construction industry would also welcome the opportunity to participate in such a dialogue.

Thank you again for your interest in this vital Project. On behalf of the B/PB Joint Venture, I appreciate this opportunity to appear before the Committee.